

Statewide Impacts

Economic Impact

- There were nearly **48,000 fewer construction jobs in North Carolina** in the first quarter of 2017 compared to a decade earlier. Counties outside of the Charlotte and Triangle metro areas accounted for most of the shortfall in construction jobs (35,000).
- Based on the annual March edition of the Current Population Survey during the last three years, an average of **more than 100,000 North Carolina adults ages 18-44 reported wanting a job** but had given up actively looking for work.
- Generally speaking, employment multipliers for construction-related projects vary from **10 to 14 jobs per \$1 million in direct spending**. The anticipated **economic development impact** will depend to a large degree on the specific parameters of the projects (e.g., type, location, etc.). More specific economic impacts can be determined when the allocation methodology is determined.
- The Connect NC Bond Program should provide some help to the construction industry but will be nearing completion of major construction in two years. A new bond program would **Maintain construction momentum** and avoid historic peaks and valleys of State capital financing.
- Moody's Investor Services recently wrote that national declines in state and local investments in infrastructure since 2009 is leading to deteriorating asset quality and creating a **soft liability** for taxpayers, **similar to pensions** and other mandates for funding.

Bond Finance Impact

- It is anticipated that **no additional General Fund support** for debt service will be required for the duration of the bond. This is due to offsetting debt service with receipts (Lottery, Indian Gaming, and Industrial Utility Development Fund) and the ongoing retirement of authorized and issued debt.
- This analysis assumes a 3.50% interest rate for the proposed debt. The three year average of all bond general obligation bond issuances, regardless of rating, is 3.58%. The general obligation yield for AAA rated municipalities is 2.58%.¹
- North Carolina is a **moderately low debt state**. According to Moody's, North Carolina ranks:
 - 33rd in debt per capita of state income
 - 22nd in net tax supported debt
 - 36th debt per GDP
 - 32nd in debt service ratio

¹ Data from Bond Buyer Municipal Market Statistics, retrieved October 25, 2017.

School Infrastructure Bond

- School districts reported over **\$8 billion** of school construction and renovation needs over the next five years. (NCDPI 2015-16 School Facilities Needs Survey)
- Repairs and renovations to **aging school buildings** total **\$3 billion** over the next five years to replace roofs, windows, HVAC systems and correct life/safety issues.
- Over the next five years, **118 new schools** and **459 additions** will be needed across the state.
- Over **1,500 schools** will need **significant renovations** averaging \$2 million per school.
- It has been **more than 20 years** since the last statewide school construction bond was authorized for \$1.8 billion in 1996.
- Only **one** statewide school construction bond (1996) has been authorized in the last **40 years**. In the preceding 25 year period between 1949 and 1974, the state authorized four public school bonds (NCDPI Highlights of the NC Public School Budget February 2017). **Local governments** have passed 98 general obligation Bonds for **\$11.3 billion since 1995**.
- Over **100,000 children** attended class in 2015-16 in **temporary classrooms or mobile units**. (NCDPI 2015-16 School Facilities Needs Survey)
- In North Carolina, **41%** of schools are **50 years or older** and **one out of every four schools are in fair to poor condition**. (DPI Facility Needs Survey)
- **It is very difficult for small, rural school districts to generate enough money to build or even renovate a school through the state's school construction funding formulas or through property taxes.** For example, the 10 smallest school districts each received less than \$100,000 from the Public School Building Capital Fund in 2016-17. Two LEAs received less than \$50,000 (Tyrrell and Hyde). If a small county such as Tyrrell raised their property tax one mill, they could receive only \$48,000 annually. Average cost to build schools range from \$20M for elementary schools to \$60M for high schools. (NC DPI School Clearninghouse and Local Government Commission)
- A recent study of a major, years-long school-construction initiative in New Haven, CT, found a statistically significant **improvement in overall test scores** resulting from the construction of new and renovation of existing schools. (Neilsson & Zimmerman, 2011).
- A 2005 study of Washington D.C. schools found a significant association between the physical condition of schools and **teacher retention**. (Buckley et al., 2005)

Natural Gas Infrastructure Bond

- Natural gas is a specific infrastructure need throughout all types of industries. Several of these industry sectors are key recruitment targets of the state due to their rapid growth and range of employment opportunities.
- Natural gas is not only used as a clean and efficient energy source, it also provides the base ingredients for such varied products as plastic, fertilizer, anti-freeze, and fabrics.
- **One of the top ten factors** decision makers consider when making a site location selection is energy availability and costs.
 - "With companies still looking for every avenue to cut and control costs, energy has risen to a **top-tier factor in site location.**" - James McGraw, president & CEO of KMK Consulting Company, LLC, a national site selection consulting firm
- North Carolina has several potential mega-site locations in rural counties that lack access to natural gas and do not receive the same level of interest from large industrial and manufacturing companies as sites with access to natural gas. A few examples are:
 - Great Meadows Site – 1,500-acre site in Burke & McDowell counties
 - Heart of NC MegaPark – 3,000-acre sit in Montgomery & Moore counties
 - International Logistics Park – 1,000-acre site in Columbus & Brunswick counties
- Most rural counties in the state do not have access to natural gas outside of downtown districts within the county. At an estimated cost of **\$1 million per mile of pipeline**, natural gas distributors are unable to recoup the costs of expanding in these areas.
- Natural gas can also be used to fuel buses and large trucks, which would result in lower NOx emissions than diesel fueled vehicles.
- General obligation bonds for natural gas infrastructure last issued in 1998 - \$200 million. G.S. 62-159 authorized the Utilities Commission to distribute bond funding to approved projects that were determined to not be economically feasible. If additional natural gas bonds are approved, there is existing authority and structure currently within the Utilities Commission to distribute funding.

Other Revenue/Financing Options

- \$5 million per year could be redirected from the Industrial Development Fund Utility Account. This account is financed through statutory deductions from JDIG grant payments (25% for projects in Tier 3 counties and 10% for projects in Tier 2 counties).

Broadband Infrastructure Bond

- North Carolina has the opportunity to focus policy and incentives on development of broadband infrastructure
 - Approximately **322,000 NC households (640,000 people)** do not have access to the internet at FCC threshold speeds of 25 Mbps download/3 Mbps upload
 - **48 NC counties** have a broadband deployment rate **below the national average**
 - **89%** of the NC population without broadband access **live in rural areas** (FCC)
 - Deployment rates **for fiber-to-the-premises (FTTP) in NC** are approximately **15%**, significantly lower than the US average of **24.96%**.
 - **"Homework gap"** - Children cannot complete digital homework assignments because they lack devices or connectivity at home – **33% nationally** (Pew)
 - Greater than 50% of teachers report that limited access to online resources presents major **challenges to integrating technology** in the classroom (SNG)
 - 67% families w/out internet access **cite cost as the primary reason** (Friday Inst.)
- Research demonstrates that **broadband penetration rates** are associated with **per-capita GDP growth** in nonmetropolitan counties. (Whitacre)
- In a 2013 survey conducted by NC Broadband, nearly 44% of businesses reported that **broadband access was a key factor** in their location decisions. (SNG Group)
- Broadband **impacts the efficiency and effectiveness** with which small businesses and NC's workforce can compete in the global economy (Whitacre)
 - **Only 60-70% of NC businesses report satisfaction** with their internet service
 - 90% of businesses with fiber are satisfied with their service. (SNG Group)
- Broadband impacts the economy through various pathways (Whitacre)
 - **Construction of broadband networks** affects economic activity by **creating jobs**
 - It provides a **platform for innovation, productivity, and opportunity**
 - Increased adoption **reduces the cost** of existing goods and services
 - As **adoption rises**, so does **median income** and **non-farm businesses**
- While broadband is deemed necessary for business, training on how to use it to improve operations and revenues is not routinely offered to small businesses today
 - In 2013, the primary **barrier** to strategic broadband use for small businesses was "**lack of expertise**" for 67 percent of NC small businesses (SNG Group).
- **Telehealth**, which can improve outcomes and increase the effectiveness and efficiency of health care delivery, especially in rural areas, is **dependent upon broadband** (FCC).

Conclusion: Increasing Broadband Availability and Use Improves the Economy

- **Focus on investment in next-generation technologies** capable of scaling to meet future needs and delivering the speeds that will be needed (i.e., fiber optic cable)
- **Focus on increasing adoption among households and businesses**, particularly in rural areas to promote jobs, increased median incomes, and new businesses
- **Focus on the development of strategic use programs for small businesses**